



268366

Affidavit of Thomas J. Patnode, July 21, 1986

B.N. Property

STATE OF MINNESOTA)
COUNTY OF RAMSEY } ss.

AFFIDAVIT OF

THOMAS J. PATNODE

THOMAS J. PATNODE, being first duly sworn under oath, deposes and states:

1. I am employed by Burlington Northern Railroad Company (BN) in the capacity of Environmental Engineer for the Twin Cities Region, which encompasses BN facilities in Minnesota and portions of North Dakota, South Dakota, Nebraska, Iowa and Wisconsin. My business address is 176 East Fifth Street, St. Paul, Minnesota 55101.

2. As part of my duties, I am responsible for various environmental matters involving railroad operations on the Twin Cities Region. This includes supervising hazardous material or waste investigations that may arise from past or present disposal practices on the Burlington Northern Railroad. In this regard, I represent BN as the Environmental Engineer. This affidavit is being submitted to the Stearns County Recorder pursuant to the disclosure requirements of MSA §115B.16, and I have personal knowledge of the statements herein. The legal description for the property which this disclosure covers is as follows:

That part of the South Half of the Southwest Quarter (S $\frac{1}{2}$ SW $\frac{1}{4}$) and the South Half of the Southeast Quarter (S $\frac{1}{2}$ SE $\frac{1}{4}$) of Section 8, Township 124 North, Range 28 West, together with that part of the South Half of the Southwest Quarter (S $\frac{1}{2}$ SW $\frac{1}{4}$) of Section 9, Township 124 North, Range 28 West in the City of Waite Park, Stearns County, Minnesota described as follows:

Commencing at the South quarter corner of said Section 8; thence North 00 degrees 09 minutes 53 seconds West, assumed bearing, along the North-South quarter line and along the centerline of 10th Avenue, a distance of 1182.41 feet to a point on the Southerly right-of-way line of Burlington Northern Railroad, said point being the Point of Beginning of the following described parcel; thence South 85 degrees 06 minutes 57 seconds East, along said Southerly right-of-way line, 1595.99 feet; thence Easterly a distance of 760.22 feet along a tangential curve concave to the North having a radius of 5729.58 feet and a central angle of 07 degrees 36 minutes 08 seconds; thence North 87 degrees 16 minutes 55 seconds East, along said Southerly right-of-way line, and along tangent 2943.41 feet to the East line of said Southwest Quarter of Section 9; thence South 00 degrees 25 minutes 17 seconds East, along said East line, 186.37 feet; thence South 57 degrees 43 minutes 00 seconds West 399.31 feet; thence South 88 degrees 39 minutes 10 seconds West 621.65 feet; thence North 78 degrees 37 minutes 20 seconds West 755.25 feet; thence North 89 degrees 57 minutes 55 seconds West 1614.25 feet; thence South 00 degrees 02 minutes 05 seconds West 467.56 feet; thence North 89 degrees 57 minutes 55 seconds West 113.34 feet; thence South 00 degrees 02 minutes 05 seconds West 97.30 feet; thence South 89 degrees 57 minutes 55 seconds East 183.34 feet; thence South 00 degrees 02 minutes 05 seconds West 177.16 feet; thence South 89 degrees 59 minutes 25 seconds East 1514.10 feet; thence South 08 degrees 12 minutes 25 seconds East 174.12 feet to a point on the South line of said Section 9; thence North 89 degrees 33 minutes 37 seconds West, along said South line, 938.16 feet to the Southwest corner of said Section 9; thence North 90 degrees 00 minutes 00 seconds West, along the South line of said Section 8, a distance of 2644.45 feet to the South quarter corner of said Section 8; thence continuing along said South line, North 90 degrees 00 minutes 00 seconds West 1342.00 feet; thence Northwesterly at a right angle to the Sauk River to the centerline of the Sauk River; thence Northerly, Westerly and Northeasterly along said centerline of the Sauk River to the intersection with the Southerly right-of-way line of said Burlington Northern Railroad, said point bears North 85 degrees 06 minutes 57 seconds West from the Point of Beginning; thence South 85 degrees 06 minutes 57 seconds East, along said Southerly right-of-way line, 1763 feet more or less to the Point of Beginning. Containing 126.4 acres more or less. Subject to 3rd Street North and 10th Avenue right-of-way easement and subject to any easements of record. Also subject to the following described easements:

This property is hereinafter referred as the "BN site."

3. Great Northern Railroad began railroad car construction and maintenance operations at the BN site in approximately 1894. During the next seventy years, the Great Northern Shop and later the St. Cloud Shop manufactured and maintained railroad equipment at the site. This included wooden box cars, steel baggage cars, steel box cars, snow dozers, wheel flats, weed spray cars, outfit cars, and other types of railroad equipment. Since approximately 1963, the shop has been devoted exclusively to performing repairs to various types of freight equipment. Most operations at the site are currently shut down.

4. The primary substances in the shallow and deep aquifers on the BN site include 1,1-dichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1,2,2-tetrachloroethylene, and chloroform. Total volatile organic compound concentrations are generally higher in the deeper aquifers, ranging from not detected at Wells 2D and 11D to 232 ug/l at Monitoring Well 12D. Concentrations in the shallow aquifers range from not detected at several locations to 64 ug/l at Monitoring Well 4D.

5. Four areas on the BN site from which substances may have been released to the soil or ground water are identified in the Request For Response Action (RFRA) issued by the Minnesota Pollution Control Agency on October 22, 1985. Existing data pertaining to each of these areas are discussed below. Additionally, several other possible source areas were identified during the site visit, employee interviews, and review of BN records. These areas are also discussed. The attached site map specifically identifies the following areas:

a. Waste Lagoons West of 10th Avenue

1974 aerial photos of the site indicate the presence of three waste lagoons near the western end of the Car Shop. According to BN records and employee interviews, paint waste, heavy oils and sludge from the Power Plant and shop operations may have been disposed of in this area. Other materials, such as welding wire, bolts, rivets, and sandblast sand, may also have been placed in the lagoons. The lagoons were subsequently covered with soil, and grass later grew at the surface. An oily material can sometimes be seen oozing from the cover material.

b. Calcium Hydroxide (Lime) Disposal Area

An acetylene plant operated at the BN site during the 1950's and 1960's. Calcium hydroxide (lime) residues generated during the operation of the facility were discarded in an area at the southwest corner of the shop complex. The lime was sometimes used locally for whitewash. In addition, cooking oil and molasses from steam-cleaning tank cars may have been disposed of at this location. The area was subsequently covered with soil in which grass later grew.

It should be noted that originally it was reported that calcium carbide was disposed of at this location. Since calcium carbide readily reacts with water (rain) to form calcium hydroxide, the latter is considered the most likely substance in this area.

c. Paint Shop

The Paint Shop is located in the west-central portion of the BN site. This facility was used to repaint and stencil railroad cars after they were stripped, sandblasted, and repaired elsewhere in the Car Shop.

Repainting the cars was accomplished by spray painting in an area having a dirt floor.

Site plans indicate that two underground storage tanks are located south of the Paint Shop.

d. Possible Barrelled Paint Waste Disposal Area

According to outside sources, there may be barrels of paint waste from the Paint Shop buried on the BN site. There is very little information available regarding such disposal. However, if this did occur, the area east of the municipal wells, near the railroad spurs, is considered the most likely location.

e. Other Possible Source Areas

In addition to the potential source areas described previously, several other areas on the BN site may have been contaminant sources. A brief description of these other possible source areas follows:

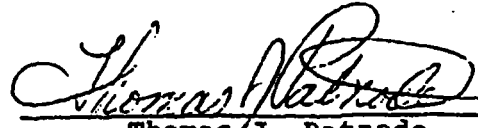
A half-buried tank that once contained No. 6 fuel oil is located south of the Boiler Building. Some fuel and sludge remain in the tank.

A tank car may have been buried near the northern boundary of the BN property. It is reported that a black liquid oozes to the surface above the tank car on a hot day.

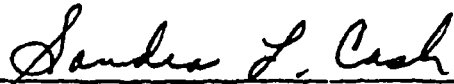
The area immediately east of the municipal well houses has been used for sandblast disposal. Sand and paint chips are still visible on the ground surface.

Other possible source areas for potential soil and ground-water contamination on the BN site have been identified on the attached map. They are the waste lagoons, the calcium hydroxide disposal area, the Paint Shop, the possible barrelled paint waste disposal area, an underground fuel tank south of the Boiler Building, a buried railroad car containing wastes, and the sandblast disposal area.

The previously described generalizations were made based on the available data. However, there are gaps and inconsistencies in the data and further investigations are required in order to more completely characterize the nature and extent of possible soil and ground-water contamination in the study area.


Thomas J. Patnode

Subscribed and sworn to before me
this 21st day of July, 1986.


Sandra L. Cash
Notary Public

